Outside Temperature Indicator Logic Explained

Currently Applies To: ALL Models

The A/C, the solar blocking glass, and the heater do such a good job keeping the temperature of the passenger's compartment at a comfortable level that it's easy to lose track of just how hot or cold it really is outside. An outside temperature indicator in the gauge assembly gives you a reality check. But keep in mind, this indicator isn't a laboratory-grade thermometer, and it might not show the same temperature as you'd see on signs or buildings with outside temp displays.

The outside air temperature sensor is mounted behind the middle of the front bumper. The gauge control module uses measurements from that sensor to display the outside air temperature.

Because of where the sensor is mounted, it may be affected by heat coming off the road, the engine, the radiator, or even the exhaust pipes from other vehicles. To minimize bogus readings, the gauge control module follows a certain logic. Here's how that logic works:

When you turn the ignition switch to ON (II). . .

- If the engine coolant temperature is **139°F or lower**, the indicator shows the current outside air temperature.
- If the engine coolant temperature is **140°F or higher**, the indicator shows the temperature that was stored in memory when you turned the ignition switch to LOCK (0), no matter what the sensor behind the bumper currently measures.

The indicator doesn't refresh until certain criteria are met:

- If the measured outside air temperature is more than the indicated temperature, the indicated temperature rises **1°F every minute** once the vehicle reaches and maintains a speed of **19 mph or faster** for at least **30 seconds**. As long as the vehicle speed doesn't drop below that, the indicator refreshes every **60 seconds** until the two temperatures match. If the vehicle speed drops below 19 mph, the indicator doesn't start to refresh again until the vehicle speed climbs to 19 mph or faster for more than **90 seconds**.
- If the measured outside air temperature is less than the indicated temperature, the indicated temperature drops **1°F every 2 seconds** until the two temperatures match, no matter what the vehicle speed is.

So here's the bottom line: The outside temperature indicator seldom delivers readings in real time because of the many heat sources that could skew the indication.

© 2007 American Honda Motor Co., Inc. – All Rights Reserved